

Emotional Analysis of Teenagers' Cultural Confidence based on MicroBlog

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Abstract: Contemporary teenagers are in the era of big data with complicated information. The communication and collision of multiple cultures make their values easy to distort and blindly pursue foreign cultures. In order to establish teenagers' cultural confidence on the Internet, this study intends to use big data analysis technology to mine the hot views of teenagers. It is intended to follow from teenagers from different age levels and different regions. The machine selects 2,000 young MicroBlog users, uses big data technology to crawl their MicroBlog data in the last three years, conduct content analysis, and get MicroBlog emotion analysis information.

Keywords: Young People; Cultural Confidence; Emotion Classification; Emotion Retrieval; Emotion Analysis.

1. Introduction

Socialism with Chinese characteristics has entered a new era, and a new journey to build a modern socialist country in an all-round way will inevitably call to a new mission of building a strong socialist culture with Chinese characteristics. Culture is the blood of a nation and the spiritual home of the people. The unique concept, wisdom, tolerance and verve of the Chinese culture have added to the deep confidence and pride of the Chinese people and nation. As General Secretary Xi Jinping has pointed out, "Cultural confidence is a more fundamental, broader and deeper confidence, and a more basic, deeper and more lasting force." The Central Committee of the Communist Party of China and The State Council recently made a major national policy: culture embodies a country's deepest emotional and spiritual pursuit. Recently, Guo Hao, a post-00s college student, took aerial photos of a thousand miles of rivers and mountains that went viral on the Internet. The magnificent rivers and mountains make countless netizens heartache, and the cultural confidence of the young generation continues to ignite. Cultural confidence is a state of mind. On the basis of affirming the national and national culture, the sense of confidence and honor is the expression of youth cultural confidence. The white paper "Chinese Youth in the New Era" points out that young people are the most active and dynamic force among the whole social force. Cultural confidence is the basis for further stimulating young people to forge ahead, pioneering and innovative. Historically, Chinese youth have always shown perseverance and firm cultural confidence. During the May 4th Movement, young students took the lead in taking to the streets to resist the exploitation and aggression of China by foreign powers. In 1921, 13 delegates with an average age of only 28 held the first National Congress of the Communist Party of China. Youth cultural confidence is not only an important factor affecting the country's comprehensive national strength, but also the source of strength for its long-term growth. Only when the young people establish a strong cultural confidence, they will consciously resist the influence of bad social ideological trend on the relationship between personal development and national development, and correctly grasp the pursuit of personal ideals into the cause of the party and

the country. Only in this way can the country have hope and the nation have a future (Wang Liang, 2022).

2. Literature Review

2.1. The Concept of Cultural Confidence

The word culture originated from the Latin word "cultura", which means the results of the cultivation and processing of the land (Barnard, 1968; Lin Yanhu, 2021). Culture is a very complex social phenomenon. Scholars define the concept of culture based on different disciplines, perspectives and environments, which has not yet received a concept recognized by all disciplines. At present, there are two main types of views on culture: one is that in the production and life of human society, all the existence that can be marked on people belongs to culture, which includes institutional culture, spiritual culture and material culture; the other is that culture is the various ideas and spiritual achievements created in the process of practice, including humanistic culture and scientific culture. Although these two views are different, both believe that culture is created by people (Qi Tianwei, 2021). Culture provides a reference basis for individual self-definition, and has a profound influence on individuals and groups. For the country and the society, culture has the functions of cognition, communication, inheritance, cohesion, education and entertainment, which is of great strategic significance in the survival and development of a nation-state (Zhang Ji, 2005). For individuals, culture also has multiple functions, including providing individuals with cognitive security and belonging. Confidence (self-confidence) is an important concept in the direction of personality psychology. Maslow (1943) put forward the concept of confidence for the first time in the hierarchy of needs theory, believing that confidence is a positive emotion experienced by an individual when an individual's self-respect needs are satisfied. Confidence is a psychological component composed of various aspects, which includes a positive evaluation of individuals and a positive attitude and affirmation of themselves, and has relatively stable characteristics (Che Liping, 2002). Relativity means that confidence is a stable personality trait but is also affected by a specific environment (Che Liping, Huang Xiting, 2006). Self-confidence plays an

important role in individuals and is conducive to their better adaptation to the social environment. It has been shown that, As protective factors for individual adaptation to society, At the level of the individual self, When individuals show confidence is accompanied by a series of positive emotional experiences such as pleasure and satisfaction, These positive emotions can help individuals to effectively reduce the adverse effects of negative emotions such as depression and anxiety ((overweight, Huang Xiting, 2006); From an interpersonal point of view, When the individual shows the confidence, Individuals have an appropriate self-evaluation of themselves, Neither too ly reliance on nor suspicious of others in interpersonal interactions, Ability to maintain appropriate interpersonal trust in interpersonal interactions, Thus promoting the development of individual peer relationships (Zhang Jiyuan, Bi double increase, 2012).

So, what is cultural confidence in? Some researchers believe that cultural confidence is the object of confidence pointing to culture, that is, individuals or groups focus the source of confidence on culture, which is the affirmation of cultural subjects to local cultural values (Chen Yongyuan, Wei Qingwang, 2020). Researchers who hold opposite views believe that the simple addition of culture and confidence cannot form cultural confidence. Cultural confidence is the affirmation and recognition of their own cultural value after understanding and understanding the history of cultural development, basic content and future development direction of culture (Shi Wenzhuo, 2017). Researchers from different perspectives of culture have different views on cultural confidence. For example, from the perspective of cultural value, cultural confidence is the firm belief and identification of individuals or groups (countries, nations, and government) to the country, national path, theory, system and culture (Shen Zhuanghai, 2016; Spruce, 2010). From the perspective of cultural subjects, cultural confidence is a high degree of recognition of individuals's own culture and positive feelings for their own culture on the basis of a certain understanding of their own culture (Xu Liang, 2018). From the perspective of cultural object, it is believed that cultural confidence is the gradual establishment of a firm belief in its own national culture after constantly understanding, thinking, comparing and identifying with the object culture (Liu Lintao, 2016). General Secretary Xi Jinping (2019) has clearly pointed out that the essence of cultural confidence is confidence in the socialist culture with Chinese characteristics, including confidence in the fine traditional Chinese culture, revolutionary culture and advanced socialist culture.

2.2. Sina Weibo

Weibo (MicroBlog) is a micro blog, which can easily publish or obtain information on the Internet. Generally users can release information to Weibo at any time through WEB and WAP clients with no more than 140 words or pictures, short videos and other forms. Weibo has won the favor of many users with its convenient and fast operation (Nimesh R, 2019). According to official data, as of March 2020, Weibo had 550 million monthly active users and 241 million average daily active users, up 850 million and 380 million respectively over the same period last year. Thus, weibo has become the public comments on the Internet and to express their views and demands one of one of the main way is not hard to find the user published in the emotional factors, it will not only affect the spread of weibo breadth and depth, and infection to other users, even make a mood accumulated rapidly in the

short term, causing social public opinion (Chen Juan, 2018). In particular, some destructive events related to public personal safety will often cause social panic due to the asymmetry of public opinion information.

3. Research Methods

3.1. Study Subjects

The respondents included 15,000 adolescents aged 11 – 22 years. Based on the existing studies showing that the values are recognized in different regions, therefore, the regions to be investigated are the regions with different degrees of economic development in China, that is, the five regions in southeast and northwest.

3.2. Study Time Period

In order to determine the capture time period of the study sample, this paper used Google Trends and Baidu search index to find the time interval. First of all, in the interface of Google Trends official website, the "geographical restrictions" is set to "China", the search keywords are "cultural confidence", "cultural pride", "cultural praise", get the Google Trends version of domestic netizens search trend change map. Google Trends Providing access to the majority of unfiltered samples of actual search requests made to Google users allows us to demonstrate interest in specific topics derived from global or city-level geography. Baidu search index is based on the number of Internet users baidu search, and through the frequency of the relevant vocabulary retrieval statistics. And the use of scientific calculation method, the search of each keyword in Baidu web page search frequency weighted statistics. Baidu search index can be divided into PC search index and mobile terminal search index according to the search source. This has an important reference for the study of keyword search trend, insight into the needs of Internet users, and monitoring the trend of media public opinion. Accordingly, in the official website interface of Baidu index, the application principle is consistent with the operation process of the above Google Trends. Select its "trend research" function, and set the key words as "cultural confidence", "cultural pride", and "cultural praise" consistent with the Google Trends.

3.3. Study Tools

3.3.1. Network Text Collection

This paper relies on the global Chinese search index of netizens provided by the two search engines as the basis for the analysis trend of COVID-19 transmission, thus judging the core time range of the public opinion on COVID-19. In addition, Python crawler software is used to capture the open source user text within the scope of the core areas of public opinion on theMicroBlog social media platform as the research data source for theme analysis and emotion analysis.

3.3.2. Sentiment Analysis

Text sentiment analysis (Text Sentiment Analysis) is also called opinion mining, tendency analysis, etc. The method based on text emotion analysis can help the organizer to accurately identify the emotion distribution of the public emotion in the public opinion field. It is closely related to, or can be considered a part of, computational linguistics, natural language processing, and text mining. Starting from the research direction of emotional state judgment in psychology, we seek to answer questions for long-term research in other discourse fields using new tools provided by data mining and

computational linguistics (Boiy, 2007). For example, valuable information involving public comments on social media platforms such as Weibo, Tieba and short video software involves many aspects for different people, matters, products or services. The comments of these messages usually carry people's diverse emotional colors and emotional tendencies, such as joy, anger, sadness, joy, criticism, praise, etc. The process of analyzing, architecture, reasoning and summarizing emotional and non-objective text. The method based on text emotion analysis can help the organizer to accurately identify the emotion distribution of the public emotion in the public opinion field.

3.3.3. Data Visualization

Combined with WordArt, pyLDAvis and other visual ways to assist in the theme feature analysis and the visual expression of emotion analysis data of the public opinion related to the COVID-19 epidemic. Among them, WordArt is an online word cloud map visualization creation website, which can help researchers to easily draw a variety of word cloud art map. Used to create word cloud images, charts, or animations to help visualize visual images. Way to convey the abstract and concrete ideas. While pyLDAvis is an interactive LDA visualization software package based on Python language. By constantly selecting new hyperparameters and comparing between models, the results of LDA modeling can be expressed in a visual and intuitive way (Boiy, 2007).

3.4. Research Platform Determination and Capture of Data

3.4.1. Determine the MicroBlog Research Platform

This paper takes Weibo as the main platform for data collection, which is because Weibo, a social media platform, is the most active social platform for netizens during the COVID-19 epidemic period. With the high incidence of online public opinion events in China, the number and heat of sudden public opinion events are soaring, and online media represented by Weibo has become the main source of public opinion for crisis events (Xie Gongtill, 2013). In the early stage of the epidemic, the MicroBlog public discussion platform was prominent, and it was the most important source for netizens to obtain epidemic information and exchange and discussion on COVID-19 related topics. Among them, the average daily epidemic information on Weibo exceeded 16 billion times, and the head author released 3.934 million pieces of epidemic information, all of which were read 1,071.8 billion times (Shi Broad, 2022).

4. Emotional Analysis: Emotional Analysis of Public Opinions on Different Themes of "COVID-19"

4.1. Construction of Network Emotion Dictionary

The large limitation of automatically identifying emotions and emotions, opinions and opinions from the text is due to the lack of criteria for understanding the differentiation between different subjective terms (Subjective Terms) and how to understand these differentiated terms affecting each other (Sailunaz K, 2019). Text recognition of emotions is more difficult than text recognition of emotions (Munezero M D, 2014). Although emotions and emotions are regarded as homologues, they represent different concepts in text analysis (Myriam D, 2014). The current results of text subject

recognition are limited to the lack of text recognition ability. Huffy, Balahu, Alm and other scholars believe that due to the lack of consistent use of proprietary terms, including emotion and emotion, the poor understanding and confusion of the text content should be considered in the text analysis (Hovy E, 2011). In the emotion analysis of this paper, in this paper, using the word "emotion" as a broad label can contain the fluctuation of emotion to reflect the representation of emotion.

At present, there are three types of emotion research on Chinese text. The first type is through emotion dictionary and syntactic structure. The second is machine learning-based (Bayes, SVM, etc.). The third is to use deep learning methods (such as LSTM, CNN, LSTM + CNN, BERT + CNN, etc.). Because of all three methods, machine learning and deep learning methods require manually labeling large amounts of data and then doing supervised training. Only the first one that does not require manual annotation and requires no training is easier to handle. Therefore, in this study, the first way based on the emotion dictionary and syntactic structure was selected to identify the emotional distribution in the network public opinion.

The Chinese emotion Dictionary selects the Chinese emotion vocabulary ontology database of Professor Lin Hongfei under the guidance of Dalian University of Technology as the main tool for emotion analysis. This emotion classification system of Chinese emotion vocabulary ontology is based on the six influential Ekman emotion classification system abroad (Sailunaz K, 2019). The vocabulary ontology adds the emotion category "good" based on Ekman to classify commendatory emotions more comprehensively. The emotions in the final vocabulary ontology are divided into 7 emotion categories and 21 subcategories.

4.2. Revision and Supplement of Emotional Thesaurus

Due to the lack of vocabulary of emotion dictionary data content, the lag of timeliness, and the different semantic expressions why some words are used in different scenes. For some of the emotional words to be discussed, which cannot accurately identify and determine the semantic characteristics of emotion, an anonymous evaluation group composed of 15 members is set up to supplement the emotional thesaurus. In combination with Net Hownet (Sailunaz K, 2019).

5. Expected Results

The overall emotion analysis results According to the jieba participate of the public opinion source data captured by the big data, the stop words are removed, and the selected words are more than equal to 2. Combine the stuttering dictionary and the emotional dictionary. Then look for the emotional words of the sentence, record the positive or negative, and the position. Finally, the mean of positive emotions and the mean of negative emotions are calculated for each clause in each comment, and then compare the sum of positive emotions and the sum of negative emotions. The larger one is the main tendency of the obtained emotion.(1) the overall distribution of emotional attributes; (2) emotion analysis.

6. Discussion

Contemporary teenagers are in the era of big data with complicated information. The communication and collision of multiple cultures make it easy to distort their values and

blindly pursue foreign cultures. In the major events occurring on Weibo, the overall emotional attribute distribution of teenagers' confidence in national culture is more positive median emotions and less negative emotions. How to use the results of this study in promoting culture confidence in youth population.

Reference

- [1] Bi Zhongzeng.(2020). Cultural distance sense and mindfulness and cultural confidence. *Journal of Southwest University (Social Science Edition)*, 46 (6), 122-129.
- [2] Bi Zhongzeng, Huang Xiting.(2006). Effect of clarity on the predictive effects of confidence. *Psychological science*, 29 (2), 271-273.
- [3] Bi Zhongzeng, Huang Xiting, Dou Gang.(2008). Confidence classification of young students. *Psychological science*, 31 (2), 431-433 + 437.
- [4] Bi Zhongzeng, Wu Liang, Zhao Yufang.(2022). Gaining a sense of meaning: the relief of cultural confidence on depression and anxiety. *Northwest Normal University Daily (Social Science edition)*, 59 (1), 89-96.
- [5] Che Liping.(2002). Research on the confidence characteristics of contemporary college students (doctoral dissertation). Southwest Normal University, Chongqing.
- [6] Che Liping, Huang Xiting.(2006). Research on the theoretical construction of confidence among young college students. *Psychological science*, 29 (3), 563-569.
- [7] Liu lintao.(2016). The concept, essential characteristics of cultural confidence and its contemporary value thought education research, (4), 21-24.
- [8] Shi Wenzhuo.(2017). Cultural confidence: basic connotation, according to the source and path of promotion, (5), 43-47.
- [9] Master broad.(2022). Theme characteristics and emotional analysis of online public opinion on public health emergencies (master's dissertation). Guizhou University for Nationalities, Guizhou Province.
- [10] Shen Zhuanghai.(2016). What kind of cultural confidence should our Party strengthen? *China's Discipline Inspection and Supervision*, (23), 37-38.
- [11] Shen Zhuanghai.(2019). On cultural confidence, Wuhan, Hubei province: Hubei People's Publishing House.
- [12] Qi Tian wei.(2021). Research on college students 'cultural confidence education in the new era (master's dissertation). Hebei University, Baoding.
- [13] Xu Liang.(2018). The scientific connotation and contemporary value theory vision of Xi Jinping's cultural confidence thought, (12), 23-27.
- [14] Wang Liang.(2022). Young people should be the practitioners of cultural confidence. *China Education Daily*, (16), 56-57.
- [15] Xi Jinping.(2019). Strengthen cultural confidence, build a strong socialist cultural country and seek truth, (12), 4-12.
- [16] Xie Gengyun.(2013). Chinese social public opinion and crisis management report. The Social Sciences Academic Press.12-14.
- [17] YunShan.(2010). Cultural consciousness, cultural confidence, cultural self-improvement -- On the prosperity and development of socialist culture with Chinese characteristics (middle). *Red flag manuscript*, (16), 4-8.
- [18] Zhang Ji.(2005). Introduction to International Politics and Culture Beijing: World Knowledge Press.
- [19] Zhang Jiyuan, Bi Zhongzeng.(2012). The relationship between confidence and interpersonal distress: the intermediary effect of clarity: *Journal of Southwest University (Natural Science Edition)*, 34 (8), 145-148.
- [20] Zhou Ting.(2021). The relationship between multi-cultural experience, hometown cultural attachment and cultural confidence (master's thesis). Southwest University, Chongqing.
- [21] Zhong Lifeng.(2007). The influence of psychological capital on employees' work performance, organizational commitment and organizational civic behavior, 39 (2), 328-334.
- [22] Alm C O.The role of affect in the computational modeling of natural language..(2012). *Language and Linguistics Compass* , 6(7): 416-430.
- [23] Balahur A, Hermida J M, Montoyo A..(2011) Building and exploiting EmotiNet, a knowledge base for emotion detection based on the appraisal theory model.*IEEE transactions on affective computing* , 3(1):88-101.
- [24] Boiy E, Hens P, Deschacht K, etal..(2007)Automatic sentiment analysis of on-line text.*International Conference on Electronic Publishing* .359-361.
- [25] Chen Juan.,Liu Yan-ping.,Deng Sheng-li..(2018).An analysis on factors influencing the dissemination effect of rumor-refuting information.*Information Science* ,2018,36(1):91-95.
- [26] Hovy E.Invited Keynote: What are Subjectivity, Sentiment, and Affect?.(2011).*Proceedings of the Workshop on Sentiment Analysis where AI meets Psychology (SAAIP 2011)*.
- [27] Maslow, A.H..(1943).A theory of human motivation. *Psychological Review* , 50, 370.
- [28] Myriam D.Munezero, Calkin Suero Montero, Erkki Sutinen, and John Pajunen..(2014) Are they Different?Affect, Feeling, Emotion, Sentiment, and Opinion Detection in Text.*IEEE Transactions on Affective Computing* , 5(2):101 {111.
- [29] Nimesh R.,Veera Raghava P.,Prince Mary S.& Bharathi B..(2019).A Survey on Opinion Mining and Sentiment Analysis.*IOP Conference Series: Materials Science and Engineering* 89:14-46.
- [30] Sailunaz K , Alhadj R ..(2019).Emotion and sentiment analysis from Twitter text.*Journal of computational science* ,36(Sep.): 101003.1-101003.18.
- [31] Osborne, E., & Taylor, D.M..(2010).The role of cultural identity clarity for self-concept clarity, self-esteem, and subjective well-being.*Personality and Social Psychology Bulletin* ,36, 883-897.
- [32] Wan, C., Chiu, C.Y., Peng, S., & Tam, K.P..(2007).Measuring cultures through intersubjective cultural norms: Implications for predicting relative identification with two or more cultures.*Journal of Cross-Cultural Psychology* , 38(2), 213-226.
- [33] Yager-Elorriaga, D., Berenson, K., & Mcwhirter, P..(2014).Hope, ethnic pride, and academic achievement: positive psychology and latino youth.*Psychology* , 5(5), 1206-1214.